

**Claims:**

1. A method for mixing and homogenisation of binding agents and additives in particular formulated for use the production of panels made from organic fibres and comprising the following method steps:

- dosing water-soluble UF/MUF resin in the range of 90% by weight,
- dosing water-soluble hardener agent in the range of 5% by weight,
- dosing not water-soluble penetration agent in the range of 2-5% of weight,
- dosing not water-soluble foaming agent in the range of 2-5% of weight,
- continuous dosing these fluids into a collective tube leading to a common dynamic mixing and homogenisation unit, and
- operation said dynamic and homogenisation unit until a homogeneous and activated resin mixture is effected, so that said mixture having a structure like an emulsion containing wax penetration micro drops.

2. A method according to claim 1, *characterized* in that use is made of automatic regulated dosing pumps for the said dosing of each of said fluids.

3. A method according to claim 1, *characterized* in that use is made of ammonium sulphate as hardener agent.

4. A method according to claim 1, *characterized* in that use is made of ammonium chloride as hardener agent.

5. A method according to claim 1, *characterized* in that use is made of polyurethane iso-cyanate as a combined penetration and foaming agent.

6. A method according to claim 1, *characterized* in that use is made of polyols as foaming agent.

7. A method according to claim 1, *characterized* in that use is made of di-phenylmethandiisocyanate as penetration agent.